BBA

Biomembranes

Vol. 1145, 1993

# Cumulative Contents

*Editorial* vii

*Information for Contributors* ix

## *Regular Papers*

Import of phosphatidylserine into isolated yeast mitochondria
*R. Simbeni, K. Tangemann, M. Schmidt, C. Ceolotto, F. Paltauf and G. Daum (Austria)* 1

Specific modifications of the membrane fatty acid composition of human myotubes and their effects on the muscular sodium channels
*H. Brinkmeier, J.V. Mutz, M.J. Seewald, I. Melzner and R. Rüdel (Germany)* 8

Mutual interaction of ion uptake and membrane potential
*G.W.F.H. Borst-Pauwels (Netherlands)* 15

Chaotropic anion–phosphatidylcholine membrane interactions: an ultra high field NMR study
*G.L. Jendrasiak, R. Smith and A.A. Ribeiro (USA)* 25

Orientation change of glycopeptide in lipid bilayer membrane induced by lectin binding
*K. Otoda, S. Kimura and Y. Imanishi (Japan)* 33

Interdigitated gel phase bilayers formed by unsaturated synthetic and bacterial glycerolipids in the presence of polymyxin B and glycerol
*J.M. Boggs and B. Tümmler (Canada, Germany)* 42

Assembly and channel-forming activity of a naturally-occurring nicked molecule of *Staphylococcus aureus* α-toxin
*T. Tomita, M. Watanabe and Y. Yarita (Japan)* 51

Effect of sub-skinning concentrations of saponin on intracellular $Ca^{2+}$ and plasma membrane fluidity in cultured cardiac cells
*H. Ishida, Y. Hirota and H. Nakazawa (Japan)* 58

Change in oligomeric structure of solubilized $Na^+/K^+$-ATPase induced by octaethylene glycol dodecyl ether, phosphatidylserine and ATP
*K. Mimura, H. Matsui, T. Takagi and Y. Hayashi (Japan)* 63

In squid axons the $Ca_i^{2+}$ regulatory site of the $Na^+/Ca^{2+}$ exchanger is drastically modified by sulfhydryl blocking agents. Evidences that intracellular $Ca_i^{2+}$ regulatory and transport sites are different
*R. DiPolo and L. Beaugé (Venezuela, Argentina, USA)* 75

Structural and functional properties of rhodopsin from rod outer segment disk and plasma membrane
*Y.-T. Hsu, S.Y.C. Wong, G.J. Connell and R.S. Molday (Canada, UK)* 85

Dehydration-induced lamellar-to-hexagonal-II phase transitions in DOPE/DOPC mixtures
*M.S. Webb, S.W. Hui and P.L. Steponkus (USA)* 93

The oligomeric structure of renal aminopeptidase N from bovine brush-border membrane vesicles
*S. Plakidou-Dymock and J.D. McGivan (UK)* 105

Porcine aortic endothelial cell membranes contain a LPAF:CoA-independent transacylase
*G.J. Jansen, C.R. Pritzker and D. Deykin (USA)* 113

Ionophore properties of OmpA of *Escherichia coli*
*N. Saint, E. De, S. Julien, N. Orange and G. Molle (France)* 119

Orientation and structure of the $NH_2$-terminal HIV-1 gp41 peptide in fused and aggregated liposomes
*I. Martin, F. Defrise-Quertain, E. Decroly, M. Vandenbranden, R. Brasseur and J.-M. Ruysschaert (Belgium)* 124

A topographical study of the electroplax sodium channel with site-directed antibodies
*H. Nakayama, K.-i. Nakayama, Y. Nonomura, M. Kobayashi, K. Kangawa, H. Matsuo and Y. Kanaoka (Japan)* 134

Configurational entropy is the driving force of ethanol action on membrane architecture
*D.-C. Wang, T.F. Taraschi, E. Rubin and N. Janes (USA)* 141

The location of amantadine hydrochloride and free base within phospholipid multilayers: a neutron and X-ray diffraction study
*K.C. Duff, A.J. Cudmore and J.P. Bradshaw (UK)* 149

Properties of gel phase lipid-trehalose bilayers upon rehydration
*L.I. Viera, S. Alonso-Romanowski, V. Borovyagin, M.R. Feliz and E.A. Disalvo (Argentina)* 157

Transport properties and inhibitor sensitivity of isolated and reconstituted porin differ from those of intact mitochondria
*G. Báthori, M. Sahin-Tóth, A. Fonyó and E. Ligeti (Hungary)* 168

## *Rapid Reports*

Actin and actin-binding proteins in plasma membranes derived from Walker 256 ascites or solid tumour cells
*G.A.J. Goodlad and C.M. Clark (UK)* 177

Misuse of graphical analysis in nonlinear sugar transport kinetics by Eadie-Hofstee plots
*G.F. Fuhrmann and B. Völker (Germany)* 180

*Corrigendum* 183

## *Regular Papers*

Characterization of the hydrophobic interaction of steroids with endoplasmic reticulum membranes by quenching of 6,8(14)-bisdehydro-17α-hydroxyprogesterone fluorescence
*W.N. Kühn-Velten and M.A. Kempfle (Germany)* 185

Characterization of the membrane-associating domain of the sperm adhesive protein, bindin
*S.J. Miraglia and C.G. Glabe (USA)* 191

Effects of alkaline pH on the stimulation of glucose transport in rat skeletal muscle
*J.-M. Ren, J.H. Youn, E.A. Gulve, E.J. Henriksen and J.O. Holloszy (USA)* 199

Alteration of the erythrocyte membrane via enzymatic degradation of ankyrin (band 2.1): subcellular surgery characterized by EPR spectroscopy
*K. Hensley, J. Postlewaite, P. Dobbs and D.A. Butterfield (USA)* 205

Characterization of an antibody to the cross-reacting determinant of the glycosyl-phosphatidylinositol anchor of human membrane dipeptidase
*S.J. Broomfield and N.M. Hooper (UK)* 212

Purification of a basic fibroblast growth factor-binding proteoglycan from bovine cardiac plasma membrane
*C.R. Ross, S. Kubinak and C.C. Hale (USA)* 219

Modulation of the synthesis and glycosylation of the glucose transporter protein by transforming growth factor-β1 in Swiss 3T3 fibroblasts
*A. Masumi, Y. Akamatsu and T. Kitagawa (Japan)* 227

Peptide hormone–membrane interactions. Intervesicular transfer of lipophilic gastrin derivatives to artificial membranes and their bioactivities
*R. Romano, M. Dufresne, M.-C. Prost, J.-P. Bali, T.M. Bayerl and L. Moroder (Germany, France)* 235

Oxidation/isomerization of 5-cholesten-3β-ol and 5-cholesten-3-one to 4-cholesten-3-one in pure sterol and mixed phospholipid-containing monolayers by cholesterol oxidase
*J.P. Slotte and A.-L. Östman (Finland)* 243

Solubilization and functional reconstitution of the human placental taurine transporter
*S. Ramamoorthy, P. Kulanthaivel, F.H. Leibach, V.B. Mahesh and V. Ganapathy (USA)* 250

Expression of liver fatty acid binding protein alters plasma membrane lipid composition and structure in transfected L-cell fibroblasts
*J.K. Woodford, J.R. Jefferson, W.G. Wood, T. Hubbell and F. Schroeder (USA)* 257

Amiloride and 5-(*N*-ethyl-*N*-isopropyl)amiloride inhibit medium acidification and glucose metabolism by the fission yeast *Schizosaccharomyces pombe*
*R.S. Haworth, E.J. Cragoe Jr. and L. Fliegel (Canada, USA)* 266

Multiple conductance levels of calcium-permeable channels activated by epidermal growth factor in A431 carcinoma cells
*A.P. Naumov, Y.A. Kuryshev and G.N. Mozhayeva (Russia)* 273

Effects of ultrasound on the steady-state transmembrane pH gradient and the permeability of acetic acid through bilayer lipid membranes
*P. Pohl, E. Rosenfeld and R. Millner (Germany)* 279

Effects of platelet-activating factor and related lipids on dielaidoylphosphatidylethanolamine by DSC, FTIR and NMR
*J. Salgado, J. Villalaín and J.C. Gómez-Fernández (Spain)* 284

Effects of 1,2-diacylglycerol and cholesterol on the hydrolysis activity of phospholipase D in egg-yolk phosphatidylcholine bilayers
*I. Yamamoto, T. Mazumi, T. Handa and K. Miyajima (Japan)* 293

Calorimetric studies of fully hydrated phosphatidylcholines with highly asymmetric acyl chains
*C. Huang, Z.-q. Wang, H.-n. Lin and E.E. Brumbaugh (USA)* 298

Effects of the phospholipid environment in the plasma membrane on receptor interaction with the adenylyl cyclase complex of intact cells
*C. Jansson, A.-S. Härmälä, D.M. Toivola and J.P. Slotte (Finland)* 311

*Cumulative Contents, Vol. 1145* 321

*Author Index* 323